

# Innovative Technology Transfer Partnership (ITTP)



## Success Story

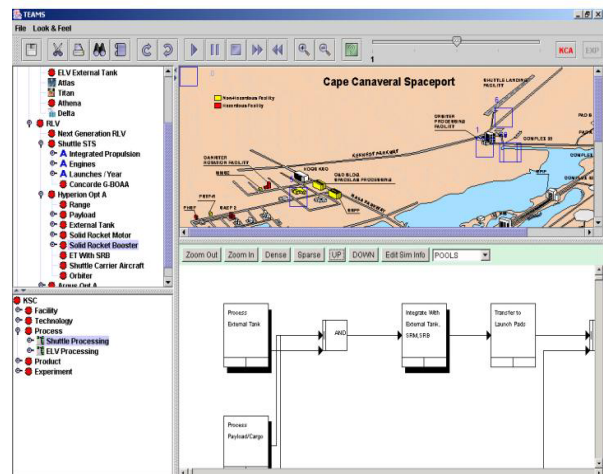
### Toolkit for Enabling Modeling and Simulation (TEAMS)

#### Description of Innovation

Knowledge Based Systems, Inc. (KBSI), an analysis, modeling and systems software development company out of College Station Texas has developed the Tool Kit for Enabling Adaptive Modeling and Simulation (TEAMS). KBSI received funding through the NASA Small Business Innovation Research (SBIR) program at Kennedy Space Center. TEAMS provides space transportation system designers a knowledge-based infrastructure for quickly and easily developing, maintaining, and reconfiguring

operations analysis models. TEAMS applications that have been developed and demonstrated are: (i) a collaborative process modeling and process knowledge management toolkit and (ii) an operations planning and schedule analysis application. TEAMS benefits include (i) ability to affordably explore a large number of space transportation system decision alternatives; (ii) higher quality space transportation system designs; and (iii) reduced spaceport development, operations, and maintenance costs.

#### TEAMS

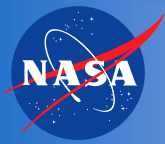


#### Value Back to NASA

The technical viability of the approach was established in an SBIR Phase I by designing and prototyping an adaptive analysis tool that facilitates collaborative design of future NASA spaceport operations processes. TEAMS provides valuable decision information to space transportation systems stakeholders, analysts and designers. It is currently in use at Kennedy Space Center for space transportation operations plan and schedule analysis.

#### Commercial Benefits

Components of the TEAMS technology are being used at Tinker Air Force Base (Air Force) and at Bender Shipbuilding and Repair Company (commercial shipyard). A component of TEAMS is currently being tested for commercial release as an extension to KBSI's commercial process modeling and analysis tool, ProSim. Follow on revenues to KBSI based on TEAMS technology applications have already exceeded \$100,000.



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### **Toolkit for Enabling Modeling and Simulation (TEAMS)**

#### **Partnership Contributions**

The development of the TEAMS technology by KBSI was primarily performed at their College Station, Texas office in 2000, 2001, and 2002. It was funded by the NASA SBIR program at Kennedy Space Center. Follow on commercialization and technology application efforts are underway with several different government and industry customers. Ongoing commercialization and technology transfer activities are being supported through a combination of internal (KBSI) and external funding sources.

#### **ITTP Role**

Dr. Perakath Benjamin of Knowledge Based Systems, Inc., applied for and was awarded a Phase I and Phase II SBIR Contract through Kennedy Space Center's SBIR/STTR Program to address NASA's need for a tool for investment decision making support and for knowledge capture. These programs are managed by NASA's Chuck Griffin and supported by ASRC Aerospace's Project Specialist, Jennifer Van Pelt.

#### **Other References, Sources**

Knowledge Based Systems, Inc. Website: [www.kbsi.com](http://www.kbsi.com)

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